Using Risk Assessment Methodologies to Meet Management Objectives

D.L. DeMott
Corporate and program objectives focus on desired performance and results.

Management decisions that affect how to meet these objectives now involve a complex mix of: technology, safety issues, operations, process considerations, employee considerations, regulatory requirements, financial concerns and legal issues.

Risk Assessments are a tool for decision makers to understand potential consequences and be in a position to reduce, mitigate or eliminate costly mistakes or catastrophic failures.
Defining Management Risks

- Management Risk can be defined as - the possibility that an event will occur and unfavorably affect the accomplishment of stated goals and objectives.

- Different types of risks that can affect a project or company include:
  - Financial markets
  - Politics and public relations
  - Legal liabilities
  - Accidents
  - Weather and other natural disasters
  - Safety Issues
  - Regulatory / Government changes
  - Environmental concerns
Defining a Risk Assessment

- Risk assessment is a systematic process for identifying and evaluating events that could affect achieving a goal or objective.

- A risk assessment should begin and end with a specific business objective associated with the identification of the potential conditions or barriers responsible not meeting the objective.

- Defined objectives provide a basis for measuring the impact and probability (usually identified as likelihood $\times$ consequence = risk) of risk ratings or rankings.
Effective Risk Management Plans and Programs Include:

- An objective and systematic program to identify, understand and act to address risks including a method to evaluate the identified “risk” and its consequences.
- A comprehensive plan for success that includes development, implementation, refinement and monitoring of effectiveness of the plan.
- Actions to ensure that Risk Management becomes an integral part of the decision making process.
- Responsibilities, training and methodology to identify risks on a continuous basis.
Risk Identification Includes:

<table>
<thead>
<tr>
<th>Safety Objectives (types of risk)</th>
<th>Program Risks Objectives (types of risks)</th>
<th>Factors to consider for Company or program risk generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>Schedule</td>
<td>Industry and industry standards,</td>
</tr>
<tr>
<td>Facility</td>
<td>Budget</td>
<td>Risk tolerance</td>
</tr>
<tr>
<td>Environment</td>
<td>Public perception</td>
<td>Tasks, tools, and environment</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
<td>Type and availability of data</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td>Industry views and requirements regarding risk &amp; reliability</td>
</tr>
</tbody>
</table>
Effective Risk Management Plans and Programs Include (continued):

- Processes to communicate risk concerns and identification
- Risk owners
- Method for prioritization
  - Who is responsible for prioritization, who needs to agree?
  - What are the basis for the priorities (methodology)?
  - How risks will be addressed
- Action plans
Analyze Risk

- Types of assessments include:
  - Qualitative assessments - generally subjective
  - Quantitative assessments - objective, data driven

- Select Methodology based on:
  - Cost and benefit
  - Fits the need

- Risk assessment as a management tool evolves and matures over time
- Benchmark and compare risk information across similar organizations
- Identify and understand risk causes to determine effective responses to minimize risks
Plan and Implement Risk Responses

- Address Risk based on:
  - Consequences
  - Cost/benefit
  - Goals and objectives

- Options for management decisions
  - Avoidance
  - Minimization
  - Acceptance

- Measure the effects of your risk management efforts
- Continuously implement improvements
Risk log/register should:

- Track Risks and Associated Tasks
- View progress & documents risk
- Focus on the current situation of each risk and identify changes
- Show responsibilities, due dates and actions
- Show or measure success
Standards

- ISO 31000 provides an internationally recognized benchmark for risk management practices with sound principles for effective management and corporate governance.

Summary/conclusion

- Using a risk assessment methodology is only a starting point.
- A risk assessment program provides management with important input in the decision making process.
- A pro-active organization looks to the future to avoid problems, a reactive organization can be blindsided by risks that could have been avoided.
- You get out what you put in, how useful your program is will be up to the individual organization.